In the Claims:

1. (Previously Presented) A wireless communication method comprising:

receiving wireless communications from at least two radioterminals at a base station co-channel over a return link using a return link alphabet; and

transmitting wireless communications from the base station to the at least two radioterminals over a forward link using a forward link alphabet that has more symbols than the return link alphabet.

2. (Original) A method according to Claim 1 wherein transmitting wireless communications from the base station to the at least two radioterminals comprises:

transmitting wireless communications from the base station to the at least two radioterminals non-co-channel over a forward link using a forward link alphabet that has more symbols than the return link alphabet.

3. (Previously Presented) A method according to Claim 1 wherein receiving wireless communications from at least two radioterminals at a base station comprises:

receiving wireless communications from at least two radioterminals at at least one antenna at the base station co-channel over a return link using a return link alphabet.

4. (Previously Presented) A method according to Claim 1 wherein receiving wireless communications from at least two radioterminals at a base station comprises:

receiving wireless communications from at least two radioterminals at at least one multiple-polarized antenna at the base station co-channel over a return link using a return link alphabet.

5. (Previously Presented) A method according to Claim 1 wherein receiving wireless communications from at least two radioterminals at a base station comprises:

receiving wireless communications from at least two radioterminals at a plurality of multiple-polarized antennas at the base station co-channel over a return link using a return link alphabet.

6. (Previously Presented) A method according to Claim 1 wherein the base station includes a plurality of sectors and wherein receiving wireless communications from at least two radioterminals at a base station comprises:

receiving wireless communications from at least two radioterminals at a plurality of multiple-polarized antennas in a sector of the base station co-channel over a return link using a return link alphabet.

7. (Previously Presented) A method according to Claim 1 wherein the base station includes a plurality of sectors and wherein receiving wireless communications from at least two radioterminals at a base station comprises:

receiving wireless communications from at least two radioterminals at at least one multiple-polarized antenna in at least two sectors of the base station co-channel over a return link using a return link alphabet.

8. (Previously Presented) A method according to Claim 1 wherein the base station is a first base station and wherein receiving wireless communications from at least two radioterminals at a base station comprises:

receiving wireless communications from at least two radioterminals at at least one multiple-polarized antenna at the first base station and at least one multiple-polarized antenna at a second base station co-channel over a return link using a return link alphabet.

9. (Previously Presented) A method according to Claim 6 wherein receiving wireless communications from at least two radioterminals at a plurality of multiple-polarized antennas in a sector of the base station co-channel over a return link using a return link alphabet comprises:

selectively receiving wireless communications from at least two radioterminals at a plurality of multiple-polarized antennas in a sector of the base station co-channel over a

return link using a return link alphabet if the at least two radioterminals are separated by more than a predetermined distance.

10. (Previously Presented) A method according to Claim 1 wherein receiving wireless communications from at least two radioterminals at a base station comprises:

receiving wireless communications from a single linearly-polarized antenna at each of the at least two radioterminals at a base station co-channel over a return link using a return link alphabet.

11. (Previously Presented) A method according to Claim 1 further comprising:

decoding the wireless communications that are received from the at least two radioterminals ~~to~~ at the base station co-channel.

12. (Previously Presented) A wireless communication method comprising:

receiving wireless communications from at least two radioterminals at a base station over a return link using a return link alphabet; and

transmitting wireless communications from the base station to the at least two radioterminals co-channel over a forward link using a forward link alphabet that has more symbols than the return link alphabet.

13. (Previously Presented) A method according to Claim 12 wherein receiving wireless communications from at least two radioterminals at a base station comprises:

receiving wireless communications from at least two radioterminals at a base station co-channel over a return link using a return link alphabet.

14. (Original) A method according to Claim 12 wherein transmitting wireless communications from the base station to the at least two radioterminals comprises:

transmitting wireless communications from the base station to at least one antenna at each of the at least two radioterminals co-channel over a forward link using a forward link alphabet that has more symbols than the return link alphabet.

15. (Original) A method according to Claim 12 wherein transmitting wireless communications from the base station to the at least two radioterminals comprises:

transmitting wireless communications from the base station to at least one multiple-polarized antenna at each of the at least two radioterminals co-channel over a forward link using a forward link alphabet that has more symbols than the return link alphabet.

16. (Original) A method according to Claim 12 wherein transmitting wireless communications from the base station to the at least two radioterminals comprises:

transmitting wireless communications from the base station to a plurality of multiple-polarized antennas at each of the at least two radioterminals co-channel over a forward link using a forward link alphabet that has more symbols than the return link alphabet.

17. (Original) A method according to Claim 12 wherein transmitting wireless communications from the base station to the at least two radioterminals comprises:

transmitting wireless communications from at least one antenna at the base station to the at least two radioterminals co-channel over a forward link using a forward link alphabet that has more symbols than the return link alphabet.

18. (Original) A method according to Claim 12 wherein transmitting wireless communications from the base station to the at least two radioterminals comprises:

transmitting wireless communications from at least one linearly-polarized antenna at the base station to the at least two radioterminals co-channel over a forward link using a forward link alphabet that has more symbols than the return link alphabet.

19. (Original) A method according to Claim 12 wherein transmitting wireless communications from the base station to the at least two radioterminals comprises:

transmitting wireless communications from at least two linearly-polarized antennas at the base station to the at least two radioterminals co-channel over a forward link using a forward link alphabet that has more symbols than the return link alphabet.

20. (Original) A method according to Claim 12 wherein the base station includes a plurality of sectors and wherein transmitting wireless communications from at least two linearly-polarized antennas at the base station to the at least two radioterminals comprises:

transmitting wireless communications from at least two linearly-polarized antennas in a sector of the base station to the at least two radioterminals co-channel over a forward link using a forward link alphabet that has more symbols than the return link alphabet.

21. (Original) A method according to Claim 12 wherein the base station includes a plurality of sectors and wherein transmitting wireless communications from at least two linearly-polarized antennas at the base station to the at least two radioterminals comprises:

transmitting wireless communications from at least one linearly-polarized antenna in at least two sectors of the base station to the at least two radioterminals co-channel over a forward link using a forward link alphabet that has more symbols than the return link alphabet.

22. (Original) A method according to Claim 12 wherein the base station is a first base station and wherein transmitting wireless communications from the base station to the at least two radioterminals comprises:

transmitting wireless communications from at least one linearly-polarized antenna at the first base station and at least one linearly-polarized antenna at a second base station to the at least two radioterminals co-channel over a forward link using a forward link alphabet that has more symbols than the return link alphabet.

23. (Original) A method according to Claim 12 further comprising:

decoding the wireless communications that are transmitted from the base station to the at least two radioterminals co-channel.

24-30. (Canceled)

31. (Previously Presented) A wireless communication method comprising:

receiving wireless communications co-channel in time division duplex from at least two radioterminals at a base station over a return link using a return link alphabet and transmitting wireless communications from the base station to the at least two radioterminals over a forward link using a forward link alphabet that has more symbols than the return link alphabet.

32. (Previously Presented) A method according to Claim 31 wherein receiving wireless communications comprises:

receiving wireless communications co-channel in time division duplex from at least two radioterminals at at least one antenna at the base station over a return link using a return link alphabet and wherein transmitting wireless communications comprises transmitting wireless communications from the at least one antenna at the base station to the at least two radioterminals over a forward link using a forward link alphabet that has more symbols than the return link alphabet.

33. (Previously Presented) A method according to Claim 31 wherein receiving wireless communications comprises:

receiving wireless communications co-channel in time division duplex from at least two radioterminals to at least one multiple-polarized antenna at the base station over a return link using a return link alphabet and wherein transmitting wireless communications comprises transmitting wireless communications from the at least one multiple-polarized antenna at the base station to the at least two radioterminals over a forward link using a forward link alphabet that has more symbols than the return link alphabet.

34. (Previously Presented) A method according to Claim 31 wherein receiving wireless communications comprises:

receiving wireless communications co-channel in time division duplex from at least two radioterminals at a plurality of multiple-polarized antennas at the base station over a return link using a return link alphabet and wherein transmitting wireless communications comprises transmitting wireless communications from the plurality of multiple-polarized

antennas at the base station to the at least two radioterminals over a forward link using a forward link alphabet that has more symbols than the return link alphabet.

35. (Previously Presented) A method according to Claim 31 wherein the base station includes a plurality of sectors and wherein receiving wireless communications comprises:

receiving wireless communications co-channel in time division duplex from at least two radioterminals at a plurality of multiple-polarized antennas in a sector of the base station over a return link using a return link alphabet and wherein transmitting wireless communications comprises transmitting wireless communications from the plurality of multiple-polarized antennas in the sector of the base station to the at least two radioterminals over a forward link using a forward link alphabet that has more symbols than the return link alphabet.

36. (Previously Presented) A method according to Claim 31 wherein the base station includes a plurality of sectors and wherein receiving wireless communications comprises:

receiving wireless communications co-channel in time division duplex from at least two radioterminals at at least one multiple-polarized antenna in at least two sectors of the base station over a return link using a return link alphabet and wherein transmitting wireless communications comprises transmitting wireless communications from the at least one multiple-polarized antenna in the at least two sectors of the base station to the at least two radioterminals over a forward link using a forward link alphabet that has more symbols than the return link alphabet.

37. (Previously Presented) A method according to Claim 31 wherein the base station is a first base station and wherein receiving wireless communications comprises:

receiving wireless communications co-channel in time division duplex from at least two radioterminals at at least one multiple-polarized antenna at the first base station and at least one multiple-polarized antenna at a second base station over a return link using a return link alphabet and wherein transmitting wireless communications comprises transmitting

wireless communications from the at least one multiple-polarized antenna at the first base station and the at least one multiple-polarized antenna at the second base station to the at least two radioterminals over a forward link using a forward link alphabet that has more symbols than the return link alphabet.

38. (Previously Presented) A method according to Claim 35 wherein receiving wireless communications co-channel in time division duplex from at least two radioterminals at a plurality of multiple-polarized antennas in a sector of the base station over a return link using a return link alphabet and transmitting wireless communications from the plurality of multiple-polarized antennas in the sector of the base station to the at least two radioterminals over a forward link using a forward link alphabet that has more symbols than the return link alphabet comprises:

selectively receiving wireless communications co-channel in time division duplex from at least two radioterminals at a plurality of multiple-polarized antennas in a sector of the base station over a return link using a return link alphabet and transmitting wireless communications from the plurality of multiple-polarized antennas in the sector of the base station to the at least two radioterminals over a forward link using a forward link alphabet that has more symbols than the return link alphabet if the at least two radioterminals are separated by more than a predetermined distance.

39. (Previously Presented) A method according to Claim 31 wherein receiving wireless communications comprises:

receiving wireless communications co-channel in time division duplex from a single linearly-polarized antenna at each of the at least two radioterminals at at least one antenna at the base station over a return link using a return link alphabet and wherein transmitting wireless communications comprises transmitting wireless communications from the at least one antenna at the base station to the single linearly-polarized antenna at each of the at least two radioterminals over a forward link using a forward link alphabet that has more symbols than the return link alphabet.

40. (Original) A method according to Claim 31 further comprising:

decoding the wireless communications that are transmitted co-channel in time division duplex from the at least two radioterminals to the base station and from the base station to the at least two radioterminals.

41. (Original) A base station comprising:

a receiver that is configured to receive wireless communications from at least two radioterminals co-channel over a return link using a return link alphabet; and

a transmitter that is configured to transmit wireless communications to the at least two radioterminals over a forward link using a forward link alphabet that has more symbols than the return link alphabet.

42. (Original) A base station according to Claim 41 wherein the transmitter is configured to transmit wireless communications to the at least two radioterminals non-co-channel over the forward link using a forward link alphabet that has more symbols than the return link alphabet.

43. (Original) A base station according to Claim 41 wherein the receiver is configured to receive wireless communications from at least two radioterminals co-channel over a return link using a return link alphabet at at least one antenna.

44. (Original) A base station according to Claim 41 wherein the receiver is configured to receive wireless communications from at least two radioterminals co-channel over a return link using a return link alphabet at at least one multiple-polarized antenna.

45. (Original) A base station according to Claim 41 wherein the receiver is configured to receive wireless communications from at least two radioterminals co-channel over a return link using a return link alphabet at a plurality of multiple-polarized antennas.

46. (Original) A base station according to Claim 41 wherein the base station includes a plurality of sectors and wherein the receiver is configured to receive wireless

communications from at least two radioterminals co-channel over a return link using a return link alphabet at a plurality of multiple-polarized antennas in a sector of the base station.

47. (Original) A base station according to Claim 41 wherein the base station includes a plurality of sectors and wherein the receiver is configured to receive wireless communications from at least two radioterminals co-channel over a return link using a return link alphabet at at least one multiple-polarized antenna in at least two sectors.

48. (Original) A base station according to Claim 41 wherein the receiver is further configured to decode the wireless communications that are received from the at least two radioterminals co-channel.

49. (Original) A base station comprising:

a receiver that is configured to receive wireless communications from at least two radioterminals over a return link using a return link alphabet; and

a transmitter that is configured to transmit wireless communications to the at least two radioterminals co-channel over a forward link using a forward link alphabet that has more symbols than the return link alphabet.

50. (Original) A base station according to Claim 49 wherein the receiver is configured to receive wireless communications from at least two radioterminals co-channel over a return link using a return link alphabet.

51. (Original) A base station according to Claim 49 wherein the transmitter is configured to transmit wireless communications to the at least two radioterminals co-channel over a forward link using a forward link alphabet that has more symbols than the return link alphabet at at least one antenna.

52. (Original) A base station according to Claim 49 wherein the transmitter is configured to transmit wireless communications to the at least two radioterminals co-channel

over a forward link using a forward link alphabet that has more symbols than the return link alphabet at at least one linearly-polarized antenna.

53. (Original) A base station according to Claim 49 wherein the transmitter is configured to transmit wireless communications to the at least two radioterminals co-channel over a forward link using a forward link alphabet that has more symbols than the return link alphabet at at least two linearly-polarized antennas.

54. (Original) A base station according to Claim 49 wherein the base station includes a plurality of sectors and wherein the transmitter is configured to transmit wireless communications to the at least two radioterminals co-channel over a forward link using a forward link alphabet that has more symbols than the return link alphabet at at least two linearly-polarized antennas in a sector.

55. (Original) A base station according to Claim 49 wherein the base station includes a plurality of sectors and wherein the transmitter is configured to transmit wireless communications to the at least two radioterminals co-channel over a forward link using a forward link alphabet that has more symbols than the return link alphabet at at least one linearly-polarized antenna in at least two sectors.

56. (Original) A base station comprising:

a time division duplex transceiver that is configured to receive wireless communications co-channel from at least two radioterminals over a return link using a return link alphabet and to transmit wireless communications to the at least two radioterminals over a forward link using a forward link alphabet that has more symbols than the return link alphabet.

57. (Original) A base station according to Claim 56 wherein the transceiver is configured to receive wireless communications co-channel from at least two radioterminals over a return link using a return link alphabet and to transmit wireless communications to the

at least two radioterminals over a forward link using a forward link alphabet that has more symbols than the return link alphabet at at least one antenna.

58. (Original) A base station according to Claim 56 wherein the transceiver is configured to receive wireless communications co-channel from at least two radioterminals over a return link using a return link alphabet and to transmit wireless communications to the at least two radioterminals over a forward link using a forward link alphabet that has more symbols than the return link alphabet at at least one multiple-polarized antenna.

59. (Original) A base station according to Claim 56 wherein the transceiver is configured to receive wireless communications co-channel from at least two radioterminals over a return link using a return link alphabet and to transmit wireless communications to the at least two radioterminals over a forward link using a forward link alphabet that has more symbols than the return link alphabet at a plurality of multiple-polarized antennas.

60. (Original) A base station according to Claim 56 wherein the base station includes a plurality of sectors and wherein the transceiver is configured to receive wireless communications co-channel from at least two radioterminals over a return link using a return link alphabet and to transmit wireless communications to the at least two radioterminals over a forward link using a forward link alphabet that has more symbols than the return link alphabet at a plurality of multiple-polarized antennas in a sector.

61. (Original) A base station according to Claim 56 wherein the base station includes a plurality of sectors and wherein the transceiver is configured to receive wireless communications co-channel from at least two radioterminals over a return link using a return link alphabet and to transmit wireless communications to the at least two radioterminals over a forward link using a forward link alphabet that has more symbols than the return link alphabet at at least one multiple-polarized antenna in at least two sectors.

62. (Original) A base station according to Claim 60 wherein the transceiver is configured to selectively receive wireless communications co-channel from at least two

radioterminals to the plurality of multiple-polarized antennas in the sector over a return link using a return link alphabet if the at least two radioterminals are separated by more than a predetermined distance.

63. (Original) A base station according to Claim 56 wherein the time division duplex transceiver is further configured to decode the wireless communications that are received co-channel from the at least two radioterminals.

64-73. (Canceled)

74. (Previously Presented) A method according to Claim 1, wherein transmitting wireless communications from the base station to the at least two radioterminals comprises:

transmitting wireless communications signals that overlap in time and space, and that use the same carrier frequency, the same time slot if the signals are Time Division Multiple Access (TDMA) signals, and the same spreading code if the signals are Code Division Multiple Access (CDMA) signals, such that the wireless communication signals collide at a receiver.

75. (Previously Presented) A method according to Claim 12, wherein receiving wireless communications from at least two radioterminals at the base station comprises:

receiving wireless communications signals that overlap in time and space, and that use the same carrier frequency, the same time slot if the signals are Time Division Multiple Access (TDMA) signals, and the same spreading code if the signals are Code Division Multiple Access (CDMA) signals, such that the wireless communication signals collide at the base station.

76. (Canceled)

77. (Previously Presented) A method according to Claim 31 wherein bidirectionally transmitting comprises:

bidirectionally transmitting wireless communications signals that overlap in time and space, and that use the same carrier frequency, the same time slot if the signals are Time Division Multiple Access (TDMA) signals, and the same spreading code if the signals are Code Division Multiple Access (CDMA) signals, such that the wireless communication signals collide at a receiver.

78. (Previously Presented) A base station according to Claim 41, wherein the receiver is configured to receive wireless communication signals that overlap in time and space, and that use the same carrier frequency, the same time slot if the signals are Time Division Multiple Access (TDMA) signals, and the same spreading code if the signals are Code Division Multiple Access (CDMA) signals, such that the wireless communication signals collide at the receiver.

79. (Previously Presented) A base station according to Claim 49, wherein the transmitter is configured to transmit wireless communication signals that overlap in time and space, and that use the same carrier frequency, the same time slot if the signals are Time Division Multiple Access (TDMA) signals, and the same spreading code if the signals are Code Division Multiple Access (CDMA) signals, such that the wireless communication signals collide at a receiver.

80. (Previously Presented) A base station according to Claim 56, wherein the transceiver is configured to receive wireless communication signals that overlap in time and space, and that use the same carrier frequency, the same time slot if the signals are Time Division Multiple Access (TDMA) signals, and the same spreading code if the signals are Code Division Multiple Access (CDMA) signals, such that the wireless communication signals collide at the transceiver.

81. (Canceled)

82. (Previously Presented) A method according to Claim 11, wherein decoding comprises:

receiving at least first and second co-channel signals at respective at least first and second antennas;

processing the at least first and second co-channel signals to derive first data that is associated with a first one of the at least two radioterminals; and

using the first data to derive second data that is associated with a second one of the at least two radioterminals.

83. (Previously Presented) A method according to Claim 82, wherein processing comprises:

deriving at least first and second decision variables;

associating with each one of the at least first and second decision variables a measure of noise and/or interference;

selecting at least one of the at least first and second decision variables responsive to at least one noise and/or interference content associated therewith;

making at least one first decision based upon the selected at least one decision variable; and

using the at least one first decision to make a second decision.

84. (Previously Presented) A method according to Claim 82, wherein processing comprises:

generating a delayed version of the at least first and second co-channel signals; and

jointly processing the at least first and second co-channel signals and the delayed version of the at least first and second co-channel signals.

85. (Previously Presented) A method according to Claim 84, wherein jointly processing comprises using a linear and/or non-linear processor.

86. (Previously Presented) A method according to Claim 85, wherein the linear and/or non-linear processor comprises a Least Mean Squared Error (LMSE), Kalman-based, least squares, recursive least squares, Zero Forcing (ZF) and/or Maximum Likelihood Sequence Estimation (MLSE) processor.

87. (Previously Presented) A method according to Claim 86, wherein jointly processing comprises cancelling Co-Channel Interference (CCI).

88. (Previously Presented) A method according to Claim 23, wherein decoding comprises:

receiving at least first and second co-channel signals at respective at least first and second antennas;

processing the at least first and second co-channel signals to derive first data that is associated with a first one of the at least two radioterminals; and

using the first data to derive second data that is associated with a second one of the at least two radioterminals.

89. (Previously Presented) A method according to Claim 88, wherein processing comprises:

deriving at least first and second decision variables;

associating with each one of the at least first and second decision variables a measure of noise and/or interference;

selecting at least one of the at least first and second decision variables responsive to at least one noise and/or interference content associated therewith;

making at least one first decision based upon the selected at least one decision variable; and

using the at least one first decision to make a second decision.

90. (Previously Presented) A method according to Claim 88, wherein processing comprises:

generating a delayed version of the at least first and second co-channel signals; and

jointly processing the at least first and second co-channel signals and the delayed version of the at least first and second co-channel signals.

91. (Previously Presented) A method according to Claim 90, wherein jointly processing comprises using a linear and/or non-linear processor.

92. (Previously Presented) A method according to Claim 91, wherein the linear and/or non-linear processor comprises a Least Mean Squared Error (LMSE), Kalman-based, least squares, recursive least squares, Zero Forcing (ZF) and/or Maximum Likelihood Sequence Estimation (MLSE) processor.

93. (Previously Presented) A method according to Claim 92, wherein jointly processing comprises cancelling Co-Channel Interference (CCI).

94-99. (Cancelled)

100. (Previously Presented) A method according to Claim 40, wherein decoding comprises:

receiving at least first and second co-channel signals at respective at least first and second antennas;

processing the at least first and second co-channel signals to derive first data that is associated with a first one of the at least two radioterminals; and

using the first data to derive second data that is associated with a second one of the at least two radioterminals.

101. (Previously Presented) A method according to Claim 100, wherein processing comprises:

deriving at least first and second decision variables;

associating with each one of the at least first and second decision variables a measure of noise and/or interference;

selecting at least one of the at least first and second decision variables responsive to at least one noise and/or interference content associated therewith;

making at least one first decision based upon the selected at least one decision variable; and

using the at least one first decision to make a second decision.

102. (Previously Presented) A method according to Claim 100, wherein processing comprises:

generating a delayed version of the at least first and second co-channel signals; and

jointly processing the at least first and second co-channel signals and the delayed version of the at least first and second co-channel signals.

103. (Previously Presented) A method according to Claim 102, wherein jointly processing comprises using a linear and/or non-linear processor.

104. (Previously Presented) A method according to Claim 103, wherein the linear and/or non-linear processor comprises a Least Mean Squared Error (LMSE), Kalman-based, least squares, recursive least squares, Zero Forcing (ZF) and/or Maximum Likelihood Sequence Estimation (MLSE) processor.

105. (Previously Presented) A method according to Claim 104, wherein jointly processing comprises cancelling Co-Channel Interference (CCI).

106. (Previously Presented) A base station according to Claim 48, wherein configured to decode comprises configured to:

receive at least first and second co-channel signals at respective at least first and second antennas;

process the at least first and second co-channel signals to derive first data that is associated with a first one of the at least two radioterminals; and

use the first data to derive second data that is associated with a second one of the at least two radioterminals.

107. (Previously Presented) A base station according to Claim 106, wherein configured to process comprises configured to:

derive at least first and second decision variables;

associate with each one of the at least first and second decision variables a measure of noise and/or interference;

select at least one of the at least first and second decision variables responsive to at least one noise and/or interference content associated therewith;

make at least one first decision based upon the selected at least one decision variable; and

use the at least one first decision to make a second decision.

108. (Previously Presented) A base station according to Claim 106, wherein configured to process comprises configured to:

generate a delayed version of the at least first and second co-channel signals; and

jointly process the at least first and second co-channel signals and the delayed version of the at least first and second co-channel signals.

109. (Previously Presented) A base station according to Claim 108, wherein configured to jointly process comprises using a linear and/or non-linear processor.

110. (Previously Presented) A base station according to Claim 109, wherein the linear and/or non-linear processor comprises a Least Mean Squared Error (LMSE), Kalman-based, least squares, recursive least squares, Zero Forcing (ZF) and/or Maximum Likelihood Sequence Estimation (MLSE) processor.

111. (Previously Presented) A base station according to Claim 110, wherein configured to jointly process comprises configured to cancel Co-Channel Interference (CCI).

112. (Previously Presented) A base station according to Claim 49, wherein the receiver comprises:

at least first and second antennas that are configured to receive respective at least first and second co-channel signals; and

a processor that is configured to process the at least first and second co-channel signals to derive first data that is associated with a first one of the at least two radioterminals

and to use the first data to derive second data that is associated with a second one of the at least two radioterminals.

113. (Previously Presented) A base station according to Claim 112, wherein the processor is further configured to:

derive at least first and second decision variables;

associate with each one of the at least first and second decision variables a measure of noise and/or interference;

select at least one of the at least first and second decision variables responsive to at least one noise and/or interference content associated therewith;

make at least one first decision based upon the selected at least one decision variable; and

use the at least one first decision to make a second decision.

114. (Previously Presented) A base station according to Claim 112, wherein the processor is further configured to:

generate a delayed version of the at least first and second co-channel signals; and

jointly process the at least first and second co-channel signals and the delayed version of the at least first and second co-channel signals.

115. (Previously Presented) A base station according to Claim 114, wherein configured to jointly process comprises using a linear and/or non-linear processor.

116. (Previously Presented) A base station according to Claim 115, wherein the linear and/or non-linear processor comprises a Least Mean Squared Error (LMSE), Kalman-based, least squares, recursive least squares, Zero Forcing (ZF) and/or Maximum Likelihood Sequence Estimation (MLSE) processor.

117. (Previously Presented) A base station according to Claim 116, wherein configured to jointly process comprises configured to cancel Co-Channel Interference (CCI).

118. (Previously Presented) A base station according to Claim 63, wherein configured to decode comprises configured to:

receive at least first and second co-channel signals at respective at least first and second antennas;

process the at least first and second co-channel signals to derive first data that is associated with a first one of the at least two radioterminals; and

use the first data to derive second data that is associated with a second one of the at least two radioterminals.

119. (Previously Presented) A base station according to Claim 118, wherein configured to process comprises configured to:

derive at least first and second decision variables;

associate with each one of the at least first and second decision variables a measure of noise and/or interference;

select at least one of the at least first and second decision variables responsive to at least one noise and/or interference content associated therewith;

make at least one first decision based upon the selected at least one decision variable; and

use the at least one first decision to make a second decision.

120. (Previously Presented) A base station according to Claim 118, wherein configured to process comprises configured to:

generate a delayed version of the at least first and second co-channel signals; and

jointly process the at least first and second co-channel signals and the delayed version of the at least first and second co-channel signals.

121. (Previously Presented) A base station according to Claim 120, wherein configured to jointly process comprises using a linear and/or non-linear processor.

122. (Previously Presented) A base station according to Claim 121, wherein the linear and/or non-linear processor comprises a Least Mean Squared Error (LMSE), Kalman-

based, least squares, recursive least squares, Zero Forcing (ZF) and/or Maximum Likelihood Sequence Estimation (MLSE) processor.

123. (Previously Presented) A base station according to Claim 122, wherein configured to jointly process comprises configured to cancel Co-Channel Interference (CCI).

124-134. (Canceled)